

Abstract

Disclosed herein is a scroll for scroll compressor, comprising an orbiting and a stationary spiral each composed of a spiral body and a base plate, in which one of the spirals is made of metal and the other is made of elastic and plastic material to provide a mutual axial and radial compensating effect. The use of elastic and plastic material for making one of the spirals allows the two spirals to contact each other surface to surface instead of linear contact, and provides a sealing effect due to deformation of the material caused by squeezing. These spirals can be formed by molding, eliminating the need of machining and surface hardening, and providing a hard oxidized layer on their surface. The use of hard material for a spiral and soft material for another spiral can lower the requirement for precision of geometric shape without loss in operating efficiency, and consequently lower their production cost. Such features also reduce noise and vibration in orbiting, make them more wear resistant, and extend their service life.